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WEATHER SEAL HAVING ELASTOMERIC MATERIAL ENCAPSULATING A BENDABLE CORE

Abstract

In order to reduce the cost of weather seal having a core or carrier which acts as an embedded support for the rubber ~~-like~~ (elastomeric) sealing material, the carrier is first contained within a substrate of low-cost rubber material, which may be applied to the core by extrusion of a substrate of recycled, reground (previously cured) rubber, preferably EPDM rubber which may include a thermoplastic olefinic material as a binder. This substrate is cohesive with an overlaying covering of uncured elastomeric material (EPDM rubber), which may be extruded over the substrate-encased carrier. The carrier, which may be sold separately or encased in the substrate, is provided to enable to the weather seal to be compressed or bent. Reinforcement elements are attached to the wire loops of the carrier, without knitting to the wire loops. The loops of the wire carrier are guided into and held in grooves in a wheel. Feed screws tangential to the wheel compress the loops. The compressed loops are brought to a process station where the reinforcement elements are applied and attached. The use of recycled cured material in a substrate and the replacement of yarn attached to a wire carrier by knitting, with overlaying reinforcement elements provides cost savings over conventional weather seal which is significant since such weather seal is used in large quantities in the automotive industry.